

IN THE CLAIMS

1. (Previously Presented) A method of providing an arbitrary sound to replace a conventional tone in a communication network, comprising:

a first step, conducted by an HLR (Home Location Register), of furnishing a call-receiving exchanger, when a location of a call-receiving terminal is registered through the call-receiving exchanger and before a call-sending is attempted from a call-sending terminal to the call-receiving terminal, with first information on whether an ordinary tone is to be replaced or not and second information informing a route to a sound providing means;

a second step, conducted by the call-receiving exchanger, of requesting a trunk connection to the sound providing means, if the call-receiving terminal is called by the call-sending terminal, based on the first and the second information while furnishing the sound providing means with third information on call state; and

a third step, conducted by the sound providing means, of determining a tone-replacing sound based on the received third information for the call-receiving terminal, and providing the determined tone-replacing sound as a ringback tone to the call-sending terminal through the call-receiving exchanger which the trunk connection is made to; and

wherein the sound providing means determines the tone-replacing sound based on an identity associated with the call-sending terminal, which group the call-sending terminal belongs to among several groups classified by a user of the call-receiving terminal, and/or calling time.

2. (Previously Presented) A method of providing an arbitrary sound to replace a conventional tone in a communication network, comprising:

a first step, conducted by an HLR (Home Location Register), of furnishing a call-receiving exchanger, when a location of a call-receiving terminal is registered through the call-receiving exchanger and before a call-sending is attempted from a call-sending terminal to the call-receiving terminal, with first information on whether an ordinary tone is to be replaced or not and second information informing a route to a sound providing means;

a second step, conducted by the call-receiving exchanger, of requesting a first trunk connection to the sound providing means, if the call-receiving terminal is called by a second-in-time call-sending terminal under already-connected condition to a first-in-time terminal, based on the first and the second information while providing the sound providing means with third information on call state;

a third step, conducted by the sound providing means, of determining a tone-replacing sound based on the received third information for the call-receiving terminal, and providing the determined tone-replacing sound as a ringback tone to the second-in-time call-sending terminal-through the call-receiving exchanger;

a fourth step, conducted by the call-receiving exchanger, of requesting release of the first trunk connection to the sound providing means, if the call-receiving terminal accepts the call from the second-in-time call-sending terminal, and requesting a second trunk connection to the sound providing means for the connected first-in-time terminal while providing the sound providing means with fourth information on call-switched; and

a fifth step, conducted by the sound providing means, of determining a tone-replacing sound based on the received fourth information for the call-receiving terminal, and providing the determined tone-replacing sound as a call-waiting tone to the first-in-time terminal through the call-receiving exchanger which the second trunk connection is made to;

wherein the sound providing means determines the tone-replacing sound based on an identity associated with the call-sending terminal, which group the call-sending terminal belongs to among several groups classified by a user of the call-receiving terminal, and/or calling time.

3. (Original) The method of claim 1, wherein the third information is to indicate that the terminal is busy.

4. (Previously Presented) The method of claim 2, wherein the fourth information is to indicate that either of the call-sending terminal calls is suspended to wait for call reconnection.

5. (Previously Presented) The method of claim 1, wherein the first

information on whether an ordinary tone is to be replaced or not is set in the HLR based on specific key information received from the call-receiving terminal.

6. (Previously Presented) The method of claim 1, wherein the first and the second information are included in a response message to a location registration request message, the response message being sent from the HLR to the call-receiving exchanger.

7. (Original) The method of claim 6, wherein the first information is written in a reserve field allocated in value-added service parameters of subscriber's profile.

8. (Canceled).

9. (Previously Presented) The method of claim 1, wherein a message to request the trunk connection to the sound providing means includes called-identification and caller-identification information.

10. (Previously Presented) The method of claim 1, wherein the sound providing means changes a current tone-replacing sound specified for the call-receiving terminal with another one through communication with a web server operating based on internet protocol.

11. (Original) The method of claim 10, wherein said another sound is one already stored in the sound providing means or received newly via the web server.

12. (Original) The method of claim 2, wherein the third information is to indicate that the terminal is busy.

13. (Previously Presented) The method of claim 2, wherein the first information on whether an ordinary tone is to be replaced or not is set in the HLR based on specific key information received from the call-receiving terminal.

14. (Previously Presented) The method of claim 2, wherein the first and the second information are included in a response message to a location registration request message, the response message being sent from the HLR to the call-receiving exchanger.

15. (Canceled).

16. (Previously Presented) The method of claim 2, wherein a message to request the trunk connection to the sound providing means includes called-identification and caller-identification information.

17. (Previously Presented) The method of claim 2, wherein the sound providing means changes a current tone-replacing sound specified for the call-receiving terminal with another one through communication with a web server operating based on internet protocol.